Title (en)

THIN FILM TRANSISTOR ARRAY AND IMAGE DISPLAY DEVICE

Title (de)

DÜNNSCHICHTTRANSISTORANORDNUNG UND BILDANZEIGEVORRICHTUNG

Title (fr)

RÉSEAU DE TRANSISTORS EN COUCHE MINCE ET DISPOSITIF D'AFFICHAGE D'IMAGE

Publication

EP 3051579 B1 20180321 (EN)

Application

EP 14849709 A 20140911

Priority

- JP 2013198155 A 20130925
- JP 2014004704 W 20140911

Abstract (en)

[origin: EP3051579A1] Provided is a thin film transistor array which does not employ photolithography for forming an interlayer insulation film and has few defects in the interlayer insulation film. The thin film transistor array at least includes an insulation substrate; a gate electrode; a gate insulation film; a source electrode; a drain electrode; a semiconductor layer; a protective layer that covers the semiconductor layer; a pixel electrode; and an interlayer insulation film formed between the drain electrode and the pixel electrode. The interlayer insulation film is an organic film or a mixed film made of an organic material and an inorganic material, including a via hole that connects the pixel electrode to the drain electrode. The drain electrode includes an opening portion located in the via hole and the drain electrode in the via hole is provided with a thiol group or a disulfide group contained thereon.

IPC 8 full level

H01L 21/336 (2006.01); **H01L 21/28** (2006.01); **H01L 21/288** (2006.01); **H01L 27/12** (2006.01); **H01L 29/786** (2006.01); **H01L 51/10** (2006.01)

CPC (source: EP US)

G02F 1/1368 (2013.01 - US); **H01L 27/1248** (2013.01 - EP US); **H01L 27/1292** (2013.01 - EP US); **H10K 10/466** (2023.02 - US); **H10K 10/88** (2023.02 - EP US); **H10K 19/10** (2023.02 - US); **H10K 59/123** (2023.02 - US); **H10K 71/13** (2023.02 - EP US); **H10K 77/10** (2023.02 - US); **H10K 85/10** (2023.02 - US); **H10K 85/111** (2023.02 - US); **H10K 85/60** (2023.02 - US); H10K 59/123 (2023.02 - EP); H10K 85/40 (2023.02 - US); H10K 85/623 (2023.02 - US); Y02E 10/549 (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3051579 A1 20160803; **EP 3051579 A4 20170503**; **EP 3051579 B1 20180321**; CN 105580120 A 20160511; CN 105580120 B 20181106; JP 6394605 B2 20180926; JP WO2015045317 A1 20170309; TW 201528348 A 20150716; TW I655678 B 20190401; US 10243157 B2 20190326; US 2016285019 A1 20160929; WO 2015045317 A1 20150402

DOCDB simple family (application)

EP 14849709 A 20140911; CN 201480053246 A 20140911; JP 2014004704 W 20140911; JP 2015538884 A 20140911; TW 103132707 A 20140923; US 201615080924 A 20160325